

**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

**JD Status: DRAFT**

## SECTION I: BACKGROUND INFORMATION

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** 22-May-2008

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Norfolk District, NAO-2007-04271-GDC-JD1

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State : VA - Virginia  
County/parish/borough: Chesapeake  
City:  
Lat: 36.8180555555556  
Long: -76.455  
Universal Transverse Mercator: []  
Name of nearest waterbody: Bailey Creek  
Name of nearest Traditional Navigable Water (TNW): Bailey Creek  
Name of watershed or Hydrologic Unit Code (HUC): 2080208



Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.



Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with the action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION:**



22-May-2008

Office Determination Date:



07-May-2008

Field Determination Date(s):

## SECTION II: SUMMARY OF FINDINGS

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION**

There ☐ "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.



Waters subject to the ebb and flow of the tide.



Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain:

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There ☐ "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area.

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area:<sup>1</sup>**

Water Name	Water Type(s) Present
2007-4271 Keel Wetland 1	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

**b. Identify (estimate) size of waters of the U.S. in the review area:**Area: (m<sup>2</sup>)

Linear: (m)

**c. Limits (boundaries) of jurisdiction:**

based on: [ ]

OHWM Elevation: (if known)

**2. Non-regulated waters/wetlands:<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

**SECTION III: CWA ANALYSIS****A. TNWs AND WETLANDS ADJACENT TO TNWs****1. TNW**

Not Applicable.

**2. Wetland Adjacent to TNW**

Not Applicable.

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):****1. Characteristics of non-TNWs that flow directly or indirectly into TNW****(i) General Area Conditions:**

Watershed size: 200 acres

Drainage area: 200 acres

Average annual rainfall: 45 inches

Average annual snowfall: 2 inches

**(ii) Physical Characteristics****(a) Relationship with TNW:**☐ Tributary flows directly into TNW.☒ Tributary flows through [ ] tributaries before entering TNW.

:Number of tributaries

Project waters are 1 (or less) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project Waters are 1 (or less) aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial(straight) miles from RPW.



Project waters cross or serve as state boundaries.

Explain:

Identify flow route to TNW:<sup>5</sup>

Wetlands are adjacent to tributaries to interstate waters. A primary tributary runs the northern boundary of the wetlands toward tidal waters. Over land flow during rain events and groundwater discharge during periods with a high seasonal water table run into the primary tributary (excavated from hydric soils and tributary to tidal waters). From this tributary, water flows east along a City of Norfolk Water Main Line into Bailey Creek, a tidal interstate waterway. The GIS hydrography map shows a break just west of Bailey Creek. A field visit of today indicates that no such break exists.

**Tributary Stream Order, if known:**

Not Applicable.

**(b) General Tributary Characteristics:****Tributary is:**

Not Applicable.

**Tributary properties with respect to top of bank (estimate):**  
Not Applicable.

**Primary tributary substrate composition:**  
Not Applicable.

**Tributary (conditions, stability, presence, geometry, gradient):**  
Not Applicable.

**(c) Flow:**  
Not Applicable.

**Surface Flow is:**  
Not Applicable.

**Subsurface Flow:**  
Not Applicable.

**Tributary has:**  
Not Applicable.

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:**

**High Tide Line indicated by:**  
Not Applicable.

**Mean High Water Mark indicated by:**  
Not Applicable.

**(iii) Chemical Characteristics:**  
**Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).**  
Not Applicable.

**(iv) Biological Characteristics. Channel supports:**  
Not Applicable.

## **2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

**(i) Physical Characteristics:**  
**(a) General Wetland Characteristics:**  
**Properties:**  
Not Applicable.

**(b) General Flow Relationship with Non-TNW:**  
**Flow is:**  
Not Applicable.

**Surface flow is:**  
Not Applicable.

**Subsurface flow:**  
Not Applicable.

**(c) Wetland Adjacency Determination with Non-TNW:**  
Not Applicable.

**(d) Proximity (Relationship) to TNW:**  
Not Applicable.

**(ii) Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).  
Not Applicable.

**(iii) Biological Characteristics. Wetland supports:**

Not Applicable.

**3. Characteristics of all wetlands adjacent to the tributary (if any):**

All wetlands being considered in the cumulative analysis:

Wetland Name	Directly Abuts	Size (ac)
2007-4271 Keel Wetland 1	No	9429.17448
<b>Total:</b>		<b>9429.17448</b>

**Summarize overall biological, chemical and physical functions being performed:**

Wetland Name	
2007-4271 Keel Wetland 1	6. Significant Nexus Factors: A. Water Quality: These wetlands provide a source of higher quality water to the tributary system

**C. SIGNIFICANT NEXUS DETERMINATION**

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

**Findings for: 2007-4271 Keel Wetland 1**

6. Significant Nexus Factors: A. Water Quality: These wetlands provide a source of higher quality water to the tributary system and receiving interstate navigable waters. By detaining water and allowing sediments to settle and be subjected to the wetlands filtering properties, the water that runs from this site into interstate waters is of higher quality; thereby increasing their condition. Less sedimentation, and the associated nutrients bound with sediments, and less nutrients from other sources flows into Bailey Creek. B. Flood Storage: The precipitation detention benefits of the wetlands and significant and commensurate with their size. These wetlands with Deloss or Tomotley soils hold rainwater for various amounts of time depending on conditions, preventing rapid release of water into receiving tributaries and waters. Much of the precipitation falling on this site infiltrates into the sandy C-Horizon and recharges the ground water table. This reduces the potential for run-off flash flooding and the back up of tidal waters, thereby reducing the potential for flooding developed areas during certain rain events. C. Denitrification: By holding water, the soils become anaerobic, and anaerobic cell respiration occurs. Soil microbes begin to use nitrogen instead of oxygen, thereby reducing the nitrogen runoff into interstate waters. Nitrogen is a primary nutrient pollutant in interstate waters that leads to algal blooms. These blooms can be toxic to marine and other organisms, and remove oxygen from the water causing death of organisms, and exacerbating the process. The United States is experiencing numerous dead zones caused by this process, which are harming marine life, shellfish and seafood production, and potentially recreation and waterfront property values. D. Effect of Loss or Conversion: If the wetlands in question were filled and developed without permit review, protections, and mitigation for impacts to downstream waters; there would inherently be more discharge of sediment and nutrients into the tributaries and into interstate waters. Long term water quality of the inputs from this site to receiving waters would be degraded along with the condition of the receiving waters. Potential for flash flooding and disruption of roadways due to high tide flooding would be increased (especially in the aggregate). 7. Analysis of Waters/Wetlands on a Cumulative Basis: The Federal Government and Regulatory Program are required to treat all parties equally in our decisions and deliberations based on site specifics. Therefore, what we decide for this property has some bearing on how we treat other properties. Accordingly, and per the 404(b)(1) guidelines and certain MOAs, we perform a cumulative impacts analysis. A. Current Condition of the Watershed: The Bailey Creek, Elizabeth River, and Chesapeake Bay watersheds have experienced a great deal of development, surface hardening, deforestation, agricultural conversion, and pollution inputs. Therefore, the functions and values of the remaining wetlands provide a needed benefit to the quality of receiving waters. Much literature exists documenting the degraded condition of these waterways. B. Potential Cumulative Effects: If jurisdiction were declined or impacts were to go unmitigated for this site, hundreds or thousands of acres of similarly situated wetlands would be similarly affected, and the detriments to interstate waters noted in number 6 above would be multiplied by the loss across the entire system over time. With development pressures in this area, unregulated wetlands would be lost at a rapid rate. The negative impact would actually be exponential, because the sum of the whole, if lost, would be greater than the proportion of any individual minor loss. It would potentially cause a significant degradation to the navigable capacity and water quality of the receiving waters. Similar degradations on other watersheds that have experienced such development and loss of wetlands have been documented. On an aggregate scale, this degradation has high potential to be highly significant to the condition and quality of interstate navigable waters. 8. Other Rapanos Issues; Development and Land Use: Regulation of wetlands has not impeded commercial and residential development in this region. In fact, residential development in the area has multiplied to the level of making many major highways fail to function at peak times. Regulation of these types of wetlands and waters is in no way an overlap or substitution for local and state government oversight of land use, which remain fully in effect with no involvement by the Corps. The regulation of these wetlands is solely from the standpoint of the benefits provided by and the effect of their loss upon resources within the federal interest and purview, interstate navigable waters and not for land use purposes.

**D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:****1. TNWs and Adjacent Wetlands:**

Not Applicable.

**2. RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**3. Non-RPWs that flow directly or indirectly into TNWs:<sup>8</sup>**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide acreage estimates for jurisdictional wetlands in the review area:**

Wetland Name	Type	Size (Linear) (m)
2007-4271 Keel Wetland 1	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs	-
<b>Total:</b>		<b>0</b>

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs:**

Not Applicable.

**Provide estimates for jurisdictional wetlands in the review area:**

Not Applicable.

**7. Impoundments of jurisdictional waters:<sup>9</sup>**

Not Applicable.

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS:<sup>10</sup>**

Not Applicable.

**Identify water body and summarize rationale supporting determination:**

Not Applicable.

**Provide estimates for jurisdictional waters in the review area:**

Not Applicable.

**F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS**

If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements:



Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce:



Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR):



Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (Explain):



Other (Explain):

**Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (ie., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment:**  
Not Applicable.

**Provide acreage estimates for non-jurisdictional waters in the review area, that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.**  
Not Applicable.

## SECTION IV: DATA SOURCES.

### A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Data sheets prepared by the Corps	-	-
--U.S. Geological Survey map(s).	-	-
--Photographs	-	-
----Aerial	-	-
--Previous determination(s).	-	-
--Applicable/supporting case law	-	-
--Applicable/supporting scientific literature	-	-

### B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

<sup>1</sup>-Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup>-For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup>-Supporting documentation is presented in Section III.F.

<sup>4</sup>-Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup>-Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

<sup>6</sup>-A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>-Ibid.

<sup>8</sup>-See Footnote #3.

<sup>9</sup>-To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>-Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.